

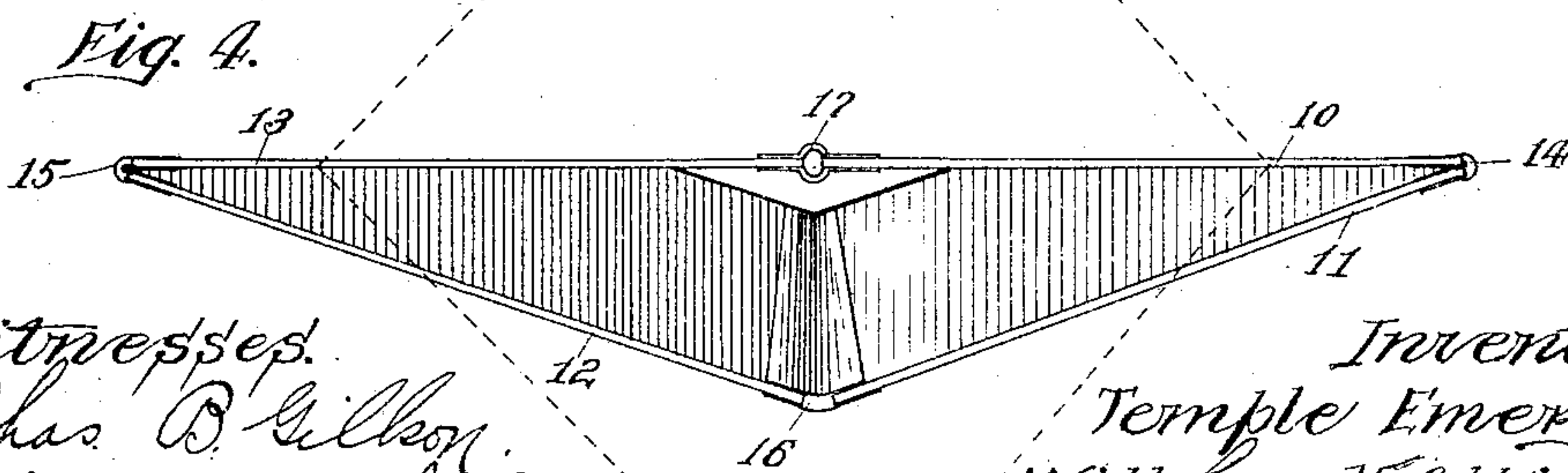
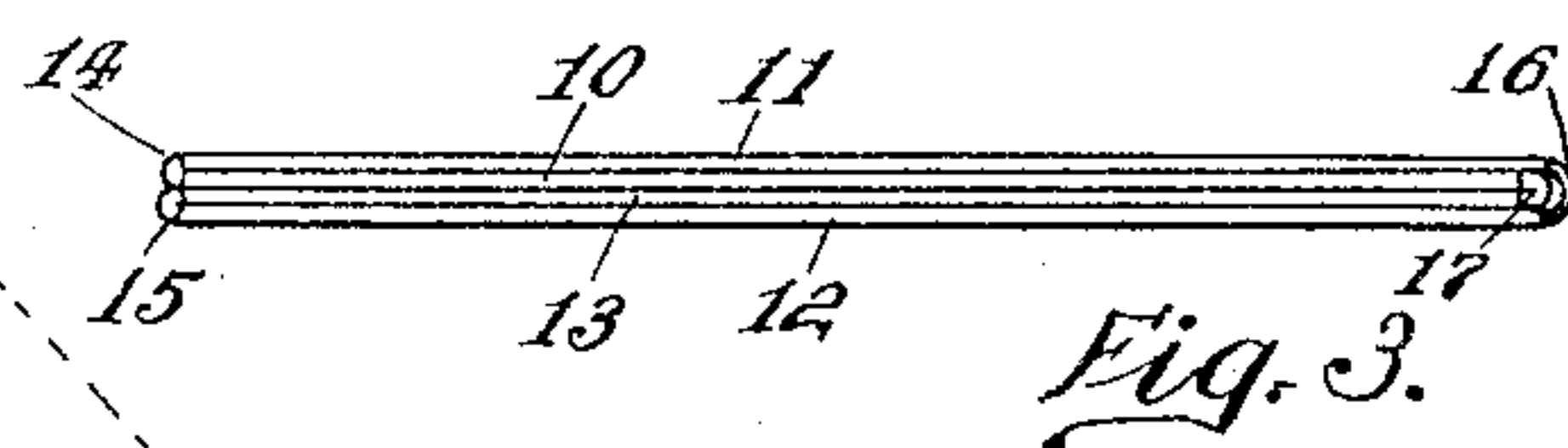
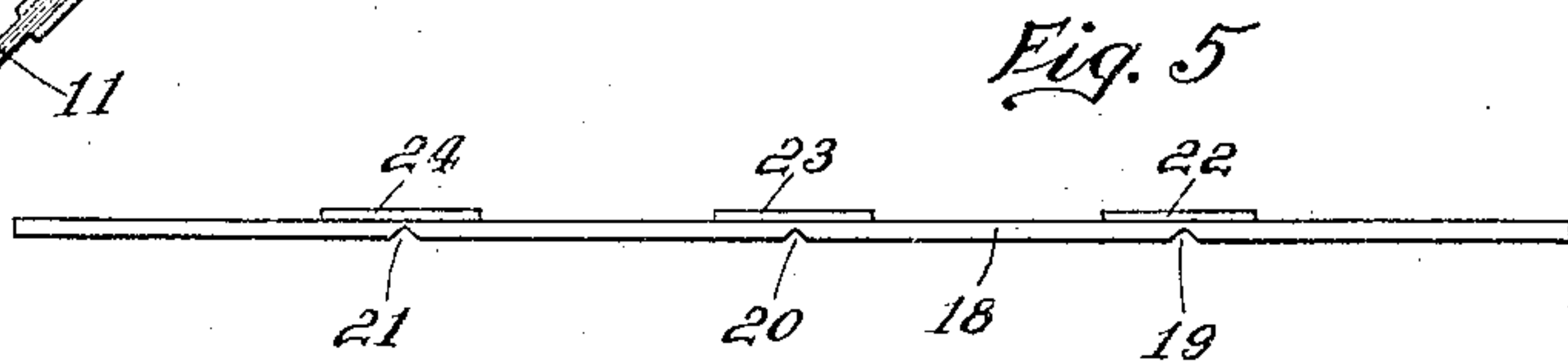
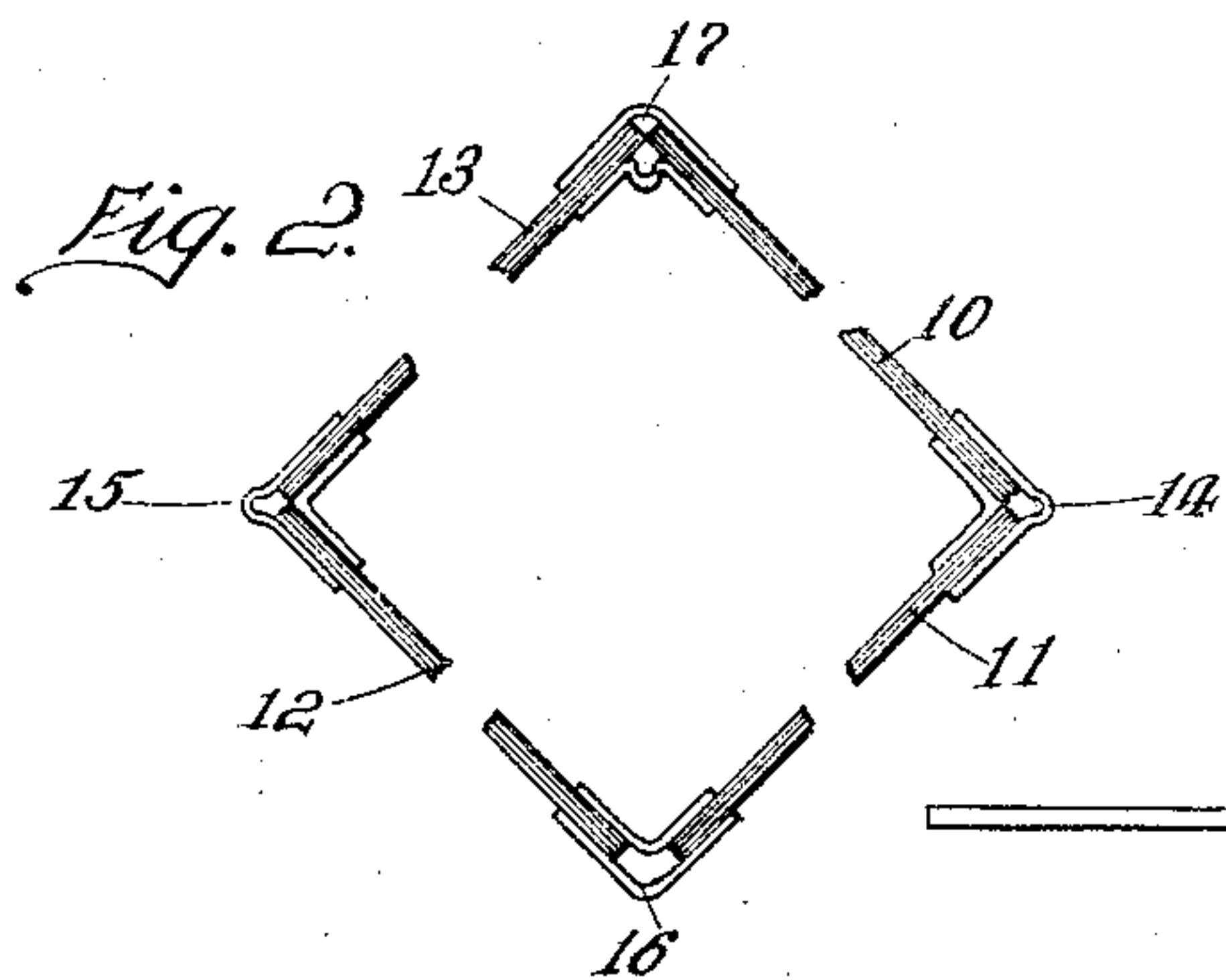
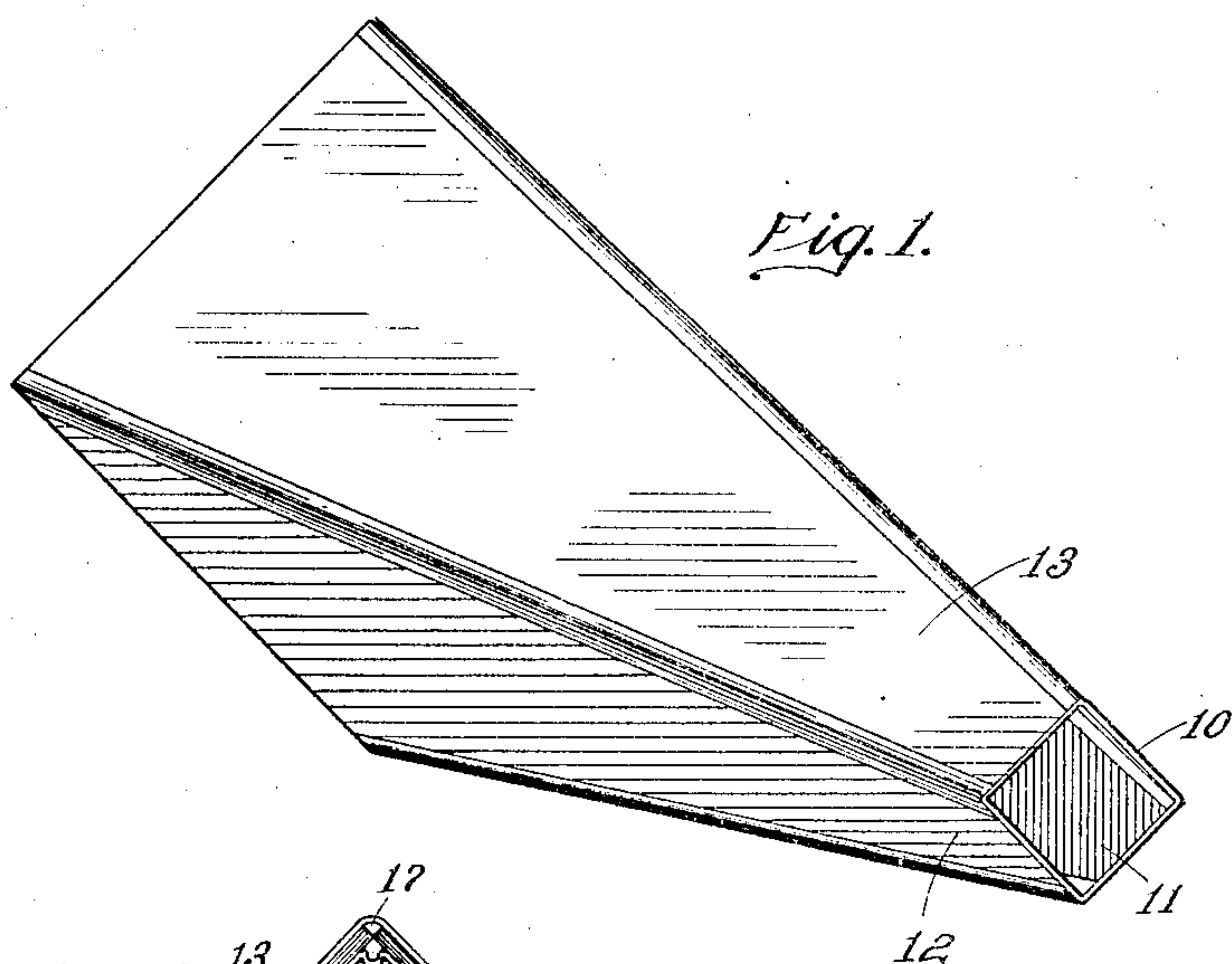
No. 781,137.

PATENTED JAN. 31, 1905.

T. EMERY, JR. & W. H. ADKINS.

MEGAPHONE.

APPLICATION FILED AUG. 10, 1904.



Witnesses.
Chas. B. Gilson.
E. M. Klatcher

Inventors.
Temple Emery Jr.
William H. Adkins.
By Louis T. Nelson
Atty.

UNITED STATES PATENT OFFICE.

TEMPLE EMERY, JR., AND WILLIAM H. ADKINS, OF ST. LOUIS, MISSOURI,
ASSIGNORS TO MIDDLEBY OVEN MANUFACTURING CO., A CORPORATION OF ILLINOIS.

MEGAPHONE.

SPECIFICATION forming part of Letters Patent No. 781,137, dated January 31, 1905.

Application filed August 10, 1904. Serial No. 220,252.

To all whom it may concern:

Be it known that we, TEMPLE EMERY, Jr., and WILLIAM H. ADKINS, citizens of the United States, and residents of St. Louis, State of Missouri, have invented certain new and useful Improvements in Megaphones, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

The object of this invention is to provide a collapsible megaphone which when not in use may be folded to so small a compass that it may be carried in the user's pocket.

To this end the invention consists in a megaphone having its side walls composed of inter-folding panels, so that the instrument will collapse or fold to a flat form.

In the accompanying drawings, forming a part of the specification, Figure 1 is a perspective of the megaphone. Fig. 2 is a detail end view of the same when open. Fig. 3 is an end view of the same when closed. Fig. 4 is an end view showing the megaphone partially closed, its open form being indicated in dotted lines; and Fig. 5 is an end view of a blank which may be used in forming the instrument and showing a modified form of construction.

In the preferred form of construction the megaphone has a plurality of sides, preferably four, as shown, its shape being that of a truncated pyramid and each of its sides being a trapezoid. When the sides, as 10, 11, 12, and 13, are made of separate pieces, they are preferably rigid and may be composed of strawboard, tarboard, celluloid, or any other suitable material. Such sides are united by any suitable form of hinge, preferably strips of binders' cloth cemented to both the outside and inside of the joint.

Referring to Figs. 2, 3, and 4, it will be seen that the instrument is folded by pressing in one of the joints, as 17, until it passes the central position and folds in the opposite direction. To accomplish this movement, the opposite joint, as 16, is necessarily pressed inwardly until the joint 17 reaches and passes beyond the position shown in solid lines in Fig. 4. When the instrument is closed, two of the sides, as 10 and 13, are folded in be-

tween the sides 11 and 12, and in order that when so folded the instrument may be compact the two inner sides are preferably of slightly less width than the two outer sides. The joints should be made with reference to ease of flexure in the desired direction only. Inasmuch as the joints 14 and 15 are never opened beyond approximately a right angle, the inner joint-strip may be shorter than the outer one, and the latter should be of sufficient length to permit the adjacent sides to come into contact without strain upon the joint. Inasmuch as the joint 16 is flexed, so as to spread the sides 11 and 12 beyond the right angle, as shown in Fig. 4, it is preferably looser or more open than the other joints, and this also provides for the spreading of the two sides somewhat in order to receive the sides 10 and 13 when the instrument is closed. As the joint 17 must be flexed in both directions, it should also be somewhat loose or open.

A cheap form of construction may be provided by not making each of the sides as a separate piece.

In Fig. 5 is shown a blank adapted to be so constructed as to constitute all of the sides of a four-side megaphone. Preferably such blank is scored, as shown at 19, 20, and 21, so that it will more readily bend to form the joints, as 14, 16, and 15, respectively, and it is desirable also to reinforce the joints by lining them with a strip of fabric, as indicated at 22, 23, and 24. The extreme edges of the blank are brought together to constitute the joint corresponding with the joint 17 of Fig. 2, and such edges may be permanently secured and hinged together in the same manner as is indicated at 17.

When the instrument is open for use, it is preferably grasped so as to bring inward pressure upon the joints 14 and 15, and as these joints are so made that they readily flex to fold together the sides united by them and do not tend to readily flex in the opposite direction beyond the position indicated in Fig. 2 such pressure will hold the instrument in its open form ready for use. It is also obvious that such an instrument may be changed in

cross-sectional form when in use—as, for example, it may be used when in the form indicated in solid lines in Fig. 1 and when so used will tend to condense the sound vertically.

5 We claim as our invention—

1. As an article of manufacture, a megaphone having its walls composed of permanently-joined interfolding panels.

10 2. As an article of manufacture, a megaphone having its walls composed of at least four panels hinged together, the hinge uniting one pair of panels flexing in both directions.

3. As an article of manufacture, a megaphone having its walls composed of four trapezoidal panels hinged together, one pair of oppositely-disposed hinges flexing to fold the sides together only, and one of the hinges intermediate of said pair flexing in both directions. 15

TEMPLE EMERY, JR.
WILLIAM H. ADKINS.

Witnesses:

ARTHUR H. HAMILTON,
EDWARD BERG, Jr.